

REMARKS

Upon entry of the Amendment, claims 1, 2, 7-9, 13, 14-17 and 19-22 are pending in the application.

Claims 1, 9, 13-15, and 17 have been amended. Claim 1 has been amended to incorporate the recitations of original claim 4 and also has been revised to recite the proper Markush language, “selected from the group consisting of.” Claim 9 has been amended to delete the recitation “viz. one.” Claims 13-15 have been amended to depend from new claim 19, which is based on original claim 12, which has been canceled. Claim 14 has also been amended to correct a typographical error, amending “superficial” to recite “supercritical.” Support for this amendment can be found on page 9, lines 9 and Example 4 of Applicants’ specification. Claim 17 has been amended to depend from new claim 19 and has also been amended to recite “at a temperature in the range of 100°C to 120°C. Support for this amendment can be found on page 12, Example 1, of Applicants’ specification.

Claims 3-6, 10-12 and 18 have been canceled.

Claims 19-22 have been added. Claim 19 is based on original claim 12, the general formula set forth in new claim 19 is derived from original claim 1. Claim 19 also includes the additional step that the matrix treated with the substituted thiourea is then subjected to supercritical fluid extraction. Claim 20 is based on original claim 10, but has been amended to delete the recitation “viz.” Claim 21 is based on original claim 18 and the general formula set forth in new claim 21 is derived from original claim 1. Support for this claim can be found at

page 9, lines 20-22 of Applicants' specification. Support for claim 22 can be found on page 9, lines 20-22 of Applicants' specification.

Additionally, with respect to new claim 19, it is respectfully submitted that the invention of the new Claim 19 is novel and not obvious. It is respectfully submitted that none of the prior art documents disclose a method for extracting a noble metal from a matrix which comprises the novel and inventive combination of initially treating the matrix with the substituted thiourea having the general formula set forth in the new Claim 19, and then subjecting the treated matrix to supercritical fluid extraction. Furthermore, it is respectfully submitted that none of the prior art documents, whether considered separately or combined, suggest a method which comprises the two steps claimed in the new Claim 19.

O'Doherty discloses an anticoccidial composition and methods for employing the anticoccidial for controlling coccidiosis in poultry. O'Doherty is silent on any other use to which the compositions may be put. There is no disclosure, nor is there any suggestion that the composition disclosed by O'Doherty could be used in a method for extracting a noble metal from a matrix.

Martin '344 discloses preparations for use as molluscicides. Martin is silent on any other uses to which the preparations could be put. There is no disclosure, nor is there any suggestion of Martin that the preparations disclosed therein could be used in a method for extracting a noble metal from a matrix.

CH 431491 discloses anthelmintic compositions for the treatment of worm infestation, for deworming animals, birds, etc. CH 431491 is silent on any other uses to which the

anthelmintic compositions may be put. CH 431491 fails to disclose or suggest the use of the anthelmintic compositions in a method for extracting a noble metal from a matrix.

Nakaya discloses an insecticidal and acaricidal agent. Nakaya is silent on any other uses to which the agent may be put, other than as an insecticidal and acaricidal agent. Nakaya fails to disclose or suggest any method for extracting a noble metal from a matrix using the insecticidal and acaricidal agent or any other agents or compositions.

DE 4016071 discloses polyfluoroalkyl nitrogen compounds which may be employed as surface-active agents or precursors of such agents. DE 4016071 is silent on any other uses to which the polyfluoroalkyl nitrogen compounds may be put, and DE 4016071 fails to disclose or suggest a method for extracting a noble metal from a matrix.

Applicants submit that the method of the new Claim 19 is novel and not obvious in light of the disclosures of any of the prior art documents, whether the prior art documents are considered separately or combined. Accordingly, it is respectfully submitted that new Claim 19 should be allowable, and allowance is respectfully requested. Since claims 13 to 17 are dependent either directly or indirectly from new Claim 19, it is respectfully submitted that claims 13 to 17 should likewise be allowable, and allowance is respectfully requested.

New claim 20 is based on original Claim 10, and has been appropriately redrafted to take into account of the rejection of the original Claim 10 under 35 U.S.C. 112. It is therefore respectfully submitted that the new Claim 20 should be allowable, and allowance is respectfully requested.

New Claim 21 is based on the original Claim 18, and claims the use of a substituted thiourea having the general formula set forth in the new Claim 21 in the extraction of gold, platinum, silver, palladium or rhodium from a matrix which now includes the two steps of treating the matrix with the substituted thiourea and subjecting the treated matrix to supercritical fluid extraction. The substituted thiourea of the new Claim 21 is similar to that claimed in the original Claim 1, and since the new Claim 21 is directed to the two steps of treating the matrix with a substituted thiourea and subjecting the treated matrix to supercritical fluid extraction, it is respectfully submitted that new Claim 21 is allowable for the same reasons as claim 19 as set forth above. Accordingly, Applicants submit that the new Claim 21 is novel and not obvious and should be allowable, and accordingly, allowance is respectfully requested.

New Claim 22 is directed towards use of a substituted thiourea having the general formula of the original Claim 1 in supercritical carbon dioxide in the solubilising and carrying of noble metals for deposition or impregnation of the noble metals. It is respectfully submitted that the invention of the new Claim 22 is novel and not obvious. None of the prior art specifications disclose or suggest the use of a substituted thiourea of the general formula set forth in Claim 22 in supercritical carbon dioxide for solubilising and carrying of noble metals for deposition or impregnation thereof. Furthermore, it is respectfully submitted that there is no suggestion in any of the prior art specifications of such a use for the substituted thiourea. Accordingly, it is respectfully submitted that the invention of the new Claim 22 is novel and not obvious, and it is therefore respectfully submitted that the new Claim 22 should be allowable, and allowance is respectfully requested.

Claims 1, 9, 10, 11, and 17 have been rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

The Examiner asserts that claim 1 recites “selected from the group which consists of,” which is improper Markush language.

Applicants have amended claim 1 to recite “selected from the group consisting of.”

The Examiner asserts that claims 9 and 10 recite “viz” which is indefinite as to what it means.

Applicants have deleted the term “viz” from claim 9. Applicants have deleted claim 10. Additionally, new claim 20 is based on original claim 10 but has been corrected so that it does not recite “viz.”

The Examiner asserts that the phrase “any said claim” in claim 11 is indefinite.

Applicants have canceled claim 11.

The Examiner asserts that the terms “(100-200°)” in claim 17 is indefinite.

Applicants have amended claim 17 to recite “at a temperature in the range of 100°C to 120°C.” Support for this amendment can be found on page 12, Example 1 of Applicants’ specification.

In view of the above, Applicants respectfully request that the Examiner reconsider and withdraw the rejections under 35 U.S.C. § 112, second paragraph.

Claim 18 is rejected under 35 U.S.C. § 101.

Applicants have canceled claim 18.

Claims 1, 2, 7 and 8 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over O'Doherty '380.

Claims 1, 2, 7, 8, and 11 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Martin '344.

Claims 1, 2, 7, 8, and 11 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over CH 431491.

Claims 1, 3, 5, 7 and 8 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakaya '412.

Claims 1, 3, 6-8 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over DE 4016071.

The Examiner asserts that O'Doherty (col. 2, lines 35-37 and col. 5, lines 5-6), Martin '344 (example 2 and col. 7, last compound, and col. 11, fifth and sixth compounds), CH 431491 (example 1), Nakaya '412 (col. 3, formula III) and DE 4016071 (page 4, lines 30-41 and example 18) suggest Applicants' claimed substituted thiourea.

Claim 1 has been amended to incorporate the recitations of original claim 4, a claim containing allowable subject matter, and also has been revised to recite the proper Markush language, "selected from the group consisting of."

Claims 3, 5, 6 and 11 have been canceled.

Applicants submit that the revised Claim 1 should now be allowable and that claims 2, 7, 8 and 9 are allowable by virtue of their dependency on claim 1. Accordingly, Applicants

respectfully request that the Examiner reconsider and withdraw the rejections over O'Doherty, Martin '344, CH 431491, Nakaya '412, and DE 4016071.

Claims 4, 9, 10, and 12-16 have been objected to as allegedly being dependent on a rejected base claim.

Claim 4 has been canceled and the recitations of claim 4 have been incorporated into newly amended claim 1. Claim 10 has been canceled and the recitations of claim 10 have been incorporated into new claim 20. Claim 12 has been canceled and the recitations of claim 12 are incorporated into new claim 19. Claims 1 and 19 are allowable. Claims 9, 13-17 depend from allowable claims. Accordingly, Applicant respectfully request that the Examiner reconsider and withdraw the objection.

The title is objected to for not being descriptive.

Applicants have amended the title to recite:

“A substituted thiourea complexing agent and a method for extracting a noble metal from a matrix using the complexing agent”.

In view of the revisions which have been made to the claims and the title, and the above comments, Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Amendment under 37 C.F.R. § 1.111
Appln. No.: 09/890,967

Q65804

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

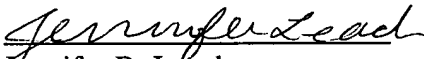
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Date: September 17, 2004